

In the Claims:

Please amend claims ¹1, ⁴4, ⁷7, ¹⁰10, and ¹²12 as follows:

A1
1. (Amended) A fuel cell system provided with a fuel cell including an anode electrode disposed opposingly with an electrolyte interposed there between, for obtaining electromotive force by supplying fuel gas containing hydrogen to said anode electrode while supplying oxygen-containing gas containing oxygen to said cathode electrode, said fuel system comprising:

a gas/liquid separator for separating discharged components discharged from said fuel cell into gas components and water, an amount of said water being changed depending on an operation condition of said fuel cell; and

a flow rate control unit for controlling a flow rate of a cooling medium supplied to said gas/liquid separator for performing heat exchange with said discharged components,

wherein the flow rate of said cooling medium is controlled depending on the amount of said water.

A2
4. (Amended) A fuel cell system provided with a fuel cell including an anode electrode and a cathode electrode disposed opposingly with an electrolyte interposed therebetween, for obtaining electromotive force by supplying fuel gas containing hydrogen to said anode electrode while supplying oxygen-containing gas containing oxygen to said cathode electrode, said fuel cell system comprising:

a gas/liquid separator for separating discharged components discharged from said fuel cell into gas components and water, an amount of said water being changed depending on an operation condition of said fuel cell ; and

a temperature control unit for controlling a temperature of a cooling medium supplied to said gas/liquid separator for performing heat exchange with said discharged components,

wherein the temperature of said cooling medium is controlled depending on the amount of said water.

7. (Amended) A fuel system provided with a fuel cell including an anode electrode and a cathode electrode disposed opposingly with an electrolyte interposed therebetween, for obtaining electromotive force by supplying fuel gas containing hydrogen to said anode electrode while supplying oxygen-containing gas containing oxygen to said cathode electrode, said fuel cell system comprising:

A3 a gas/liquid separator for separating discharged components discharged from said fuel cell into gas components and water, an amount of said water being changed depending on an operation condition of said fuel cell; and

a flow rate control unit for controlling a flow rate of a cooling medium supplied to said gas/liquid separator for performing heat exchange with said discharged components, the flow rate of said cooling medium being controlled depending on the amount of said water; and

a temperature control unit for controlling a temperature of a cooling medium depending on the amount of said water.

10. (Amended) A gas/liquid separation method for a fuel cell system for supplying, to a gas/liquid separator, discharged components discharged from a fuel cell including an anode electrode and a cathode electrode disposed opposingly with an electrolyte interposed therebetween, and separating said discharged components into gas components and water, an amount of said water being changed depending on an operation condition of said fuel cell, said method comprising the steps of:

A4 detecting changes in the amount of said water ; and

controlling a flow rate of a cooling medium supplied to said gas/liquid separator for performing heat exchange with said discharged components, depending on said changes in the amount of said water .

12. (Amended) A gas/liquid separation method for a fuel cell system for supplying, to a gas/liquid separator, discharged components from a fuel cell including an anode electrode and a cathode electrode disposed opposingly with an electrolyte interposed therebetween, and separating said discharged components into gas

components and water, an amount of said water being changed depending on an operation condition of said fuel cell, said method comprising the steps of:

detecting changes in the amount of said water; and

controlling a temperature of a cooling medium supplied to said gas/liquid separator for performing heat exchange with said discharged components, depending on said changes in the amount of said water.

A5
Cont'd